

The Basics of Benzodiazepines (and Other Sedative-Hypnotics)

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SUMMARY

- I. Introduction.
- II. Actions of sedative hypnotic drugs.
- III. Some basic pharmacology that differentiates among benzodiazepines.
- IV. Clinical indications.
- V. Safety, toxicity and side effects, and interactions.
- VI. Dosage, administration, and cost.
- VII. Specific medications.

I. Introduction.

- A. History of benzodiazepines.
- B. Role of benzodiazepines in the pharmaceutical industry.
 - 1. Wisconsin MA figures for FY 2004
 - a. Benzodiazepines & other hypnotics 3.5% of rx's and 1.5% of budget
 - 2. By contrast
 - a. Antidepressants 7.7% of rx's and 7.2% of budget
 - b. Antipsychotics 7.7% of rx's and 19.9% of budget
- C. Stigma and abuse.

II. Actions of sedative hypnotic drugs.

- A. Anxiolysis.
- B. Sedation.
- C. Hypnosis.
- D. Anesthesia.
- E. Effects of withdrawal

III. Some basic pharmacology that differentiates among benzodiazepines.

- A. Half-life.
- B. Lipid solubility.
- C. Mechanism of metabolism.

IV. Clinical indications.

- A. Anxiety disorders: acute, generalized, panic, phobias, post-traumatic stress, obsessive-compulsive, anxiety associated with medical illness.
- B. Insomnia.
- C. Agitation: mania, psychosis, depression, impulse control, behavioral control, catatonia.
- D. Withdrawal from alcohol and other sedative hypnotic medications.
- E. Involuntary movement disorders: akathisia associated with neuroleptic medications, myoclonus, restless leg syndrome.
- F. Muscle and CNS relaxation, especially with spasticity: CP, MS, paraplegia.
- G. Amnesia and relaxation prior to and during diagnostic or treatment procedures (often IV): surgery, dentistry, endoscopy, chemotherapy.
- H. Acute status epilepticus (IV).

V. Safety, toxicity and side effects, and interactions.

- A. Different types of clients who may benefit from benzodiazepines.
- B. Abuse potential for these types of clients.

VI. Dosage, administration, and cost.

- A. Basic principles of therapy.
 - 1. Assess the need, establish target symptoms.
 - 2. Educate the patient, including behavioral strategies (insomnia, anxiety), monitoring for impairment of alertness.
 - 3. Negotiate a treatment plan.
 - 4. Escalate dosage slowly.
 - 5. Aim to maintain the minimum effective dose.
 - 6. Reduce to reassess the need for maintenance.
 - 7. Discontinue by slow taper to avoid withdrawal.
 - 8. Strategies for dose escalation, lost prescriptions, running out early, etc., and how to avoid personalized fights and blaming.
- B. Table of specific medications.